

REMARKS

Reexamination and reconsideration of the application as amended are requested. Claim 14 has been rewritten in independent form. With respect to claims 1, 3, 7 and 9, Applicants have more definitely described “deformed” as “transversely and ductilely elongated”. Support for substituting “transversely and ductilely elongated” for “deformed” is found in the specification, page 5, lines 5-7, in claim 14, and in figures 6, 3 and 2 wherein figure 6 shows the “before” shape and figure 2 shows the “after” shape of the flange 26 of the crossover member 14 with the “after” shape clearly showing the at-least-one transversely and ductilely elongated portion 30 and/or 32.

The examiner's rejection of claims 1-13 as being "anticipated", under 35 U.S.C. 102, or as being “obvious”, under 35 U.S.C. 103, is respectfully traversed. The examiner rejects these claims as being unpatentable over Welling '610. Claims 2-6 depend from claim 1, and claims 8-12 depend from claim 7.

Claims 1 and 7 require that the flange 26 of the crossover member 14 of the ball nut assembly 10 have at least one transversely and ductilely elongated portion 30 and/or 32 contacting the undercut wall 24 of the outer surface 18 of the ball nut 12 of the ball nut assembly 10. Claim 13 requires transversely and ductilely elongating the flange creating a staked portion of the flange which contacts the undercut wall of the outer surface of the ball nut. It is noted that “ductile” means capable of being permanently drawn out without breaking. Welling describes resilient deformation. During operation, the button 13 (crossover member) of Welling can work itself loose, cause jamming of the balls, and even pop out. Welling does suggest optionally locking the button 13 permanently in place using an epoxy (see column 4, lines 39-42), wherein such additional epoxy step is avoided in Applicants' claimed design.

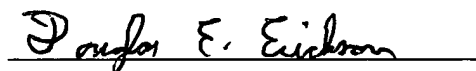
It is noted that Yoshioka, cited by the examiner, mentions plastic deformation but describes only crimping the radially-outwardly-protruding guide walls 36 of the bridge (crossover) member 24 to the inner side faces of the mounting hole (through slot) 30 of the

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rotary (ball) nut 22. Such crimped guide walls 36 of the bridge member 24 of Yoshioka are not a ductilely elongated portion of the bridge member 24 as required by applicants' claims. Also, the outer surface of the rotary nut 22 of Yoshioka does not have an undercut wall, and the crimped guide wall 36 of the bridge member 24 of Yoshioka does not contact such an undercut wall, as required by applicants' claims. Further, Yoshioka cannot have an undercut wall for the punch (crimping tool) 49 (see figure 5B) to operate. Applicants' claimed contact of a portion 30 or 34 of the flange 26 of the crossover member 14 with the undercut wall 24 of the outer surface 18 of the ball nut 12 provides a more secure attachment of the crossover member 14 compared with the crimping attachment of Yoshioka. Having a portion of a flange of a crossover member contact an undercut wall of the outer surface of the ball nut is not taught, suggested or described in Yoshioka.

Inasmuch as each of the rejections has been answered by the above remarks and amended claims, it is respectfully requested that the rejections be withdrawn, and that this application be passed to issue.

Respectfully submitted,



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